recent years, with suggestions as to further improvement in the care of the insane.

7. *Dementia Præcox in France.*—In the form of a letter from France, the author discusses the views which at present prevail among French alienists with regard to this disease. While a few have accepted the views of Kraepelin in their entirety, there appears among the majority a hesitation about recognizing the dementia præcox of the Heidelberg school as a definite clinical entity. A useful bibliography is appended.

ALLEN (Trenton).

University of Pennsylvania Medical Bulletin

(January, 1905.)

1. General or Localized Hypotonia of the Muscles in Childhood (Myotonia Congenita). WILLIAM G. SPILLER.
2. Congenital Spastic Rigidity of the Limbs (Congenital Hypertonia, Little's Disease). WILLIAM G. SPILLER.
3. Pseudobulbar Palsy. Report of Three Cases with Necropsy and of Three Cases without Necropsy. T. H. WEISENBURG.
4. Muscular Atrophy, Degeneration of the Trigeminal Nerve and of the Lateral Columns, and Anemic Changes in the Spinal Cord Occurring in Tabes Dorsalis. C. D. CAMP.
5. Combined Pseudo-systemic Disease, with Special Reference to Annular Degeneration. A. R. ALLEN.
6. A Pathological Study of Acute Myelitis. J. H. W. RHEIN.
7. Bulbar Symptoms Occurring with Carcinoma of Parts Other than the Central Nervous System, and Resulting from Intoxication. T. H. WEISENBURG.
8. Fibrous Nodules in the Cerebral Pia-arachnoid Causing the Appearance of Tuberculous Meningitis. C. D. CAMP.
9. Primary Degeneration of the Pyramidal Tracts; a Study of Eight Cases with Necropsy. WILLIAM G. SPILLER.

1. *Myotonia Congenita.*—The condition of congenital myotonia, described by Oppenheim, is a hypotonia of the limbs, especially of the lower, with weakness or loss of the tendon reflexes, observed within the first months of life. The electrical examinations have shown quantitative alteration, even complete disappearance of the reactions. Intelligence, sensation and the special senses are not disturbed. The condition is always congenital. No necropsy has hitherto been reported, but a case with necropsy is now recorded by Dr. Spiller. The parents of the child were living and well, and there was no hereditary tendency to the disease. One brother and three sisters were in good health. The patient was born six years after the previous child, and at full term, and was breast-fed until twenty-two months old. He had always been obstinately constipated, probably from atony of the abdominal walls. His weakness had not progressed. He was fairly well developed. The muscles were not wasted and the limbs were of good size, but the flesh was soft. The limbs were moved voluntarily, but the movements were weak. The patellar reflex and Achilles tendon reflex were not obtained on either side. Sensation to pinprick was preserved. The hypotonicity of all the limbs, especially of the lower, was very great. Either lower limb could be flexed so that the front part of the thigh and leg could be placed in close contact with the trunk, and the foot be placed behind the head without causing discomfort to the child. He could sit alone only for a minute or two, and only when balanced. He had never been able to stand. He died at the age of 22½ months.

The hypotonicity of the limbs twenty hours after death was as great as during life, and the absence of post-mortem rigidity was striking. In cutting into the muscles of the right calf the fat was found to be 6 mm. in thickness, there was very little muscle, and it appeared paler than normal. There was hardly any muscle in the sole of the left foot where an incision was made in this part, and only fat with a little muscle tissue could be removed for examination. The subcutaneous fat over the triceps muscle was 3 mm. in thickness. The microscopical study showed that muscles from the sole of the left foot, from the back of the trunk and from the left calf, had a hyaloid appearance, and those from the sole of the foot contained a large amount of fatty connective tissue and a considerable increase in the nuclei of the connective tissue. The muscle fibers were small, and those from the sole of the foot and from the calf were much smaller than those from the back of the trunk. The transverse striations were well preserved, but the longitudinal were not so distinct. The peripheral nerves, brain and spinal cord were normal.

The examination in this first case of congenital myotonia with necropsy shows that the condition is a muscular disorder, and not a disease of the nervous system. (Author's abstract.)

2. *Little's Disease.*—Four cases of congenital spasticity of the limbs with necropsy and without gross lesions are reported; two of these have been recorded previously. In Case I the brain and spinal cord were small, the Betz cells of the paracentral lobule and the nerve cells of the anterior horns of the spinal cord were not numerous, and the nerve fibers of the crossed pyramidal tracts were exceedingly fine. There was evidently an arrest in the development of these fibers.

In Case II no lesions explanatory of the spasticity were observed.

In Case III an arrest in the development of the pyramidal fibers was found, similar to that the author described in 1898. The child was born at the seventh month, and weighed 3½ pounds at birth. Convulsions began when she was a year and two or three months old, and later became very frequent. She did not learn to speak. Her limbs were very spastic, and her mental development was very imperfect. She died when two years and six months old. The nerve fibers in the crossed pyramidal tracts of the cervical region were very fine, and finer than those of the columns of Goll and finer than the fibers of the crossed pyramidal tracts from a normal child of the same age. The brain was well developed.

Case IV. The patient, a woman, was 70 years of age. Mentality was feeble. The upper and lower limbs were very spastic and contractured, and the patellar reflexes were exaggerated and Babinski's sign was present on each side. Speech was difficult. The condition was said by the patient to have existed since birth. The bodies of three or four cervical vertebræ extended backward into the spinal canal and compressed the spinal cord partially. The cervical cord in the compressed portion was considerably smaller than in the thoracic region, and the posterior columns in the cervical region were almost destroyed. The right crossed pyramidal tract was degenerated in its posterior portion, but the left crossed pyramidal tract did not present much degeneration. The right and left tracts of Gowers and the right direct cerebellar tract were degenerated in the cervical region. The case was one of the rare examples of early spasticity of all four limbs caused by a lesion of the spinal cord in the cervical region. The cause of displacement of the vertebræ could not be determined. It may have been produced by pulling on the head during childbirth. The condition of the posterior columns indicated that the lesion developed early in life. (Author's abstract.)

3. *Pseudo-bulbar Palsy.*—This is the first extensive paper upon this subject attempted in this country. One clinical and one pathological case had been reported previously in this country and England, respectively. After detailing the records of the cases and giving a résumé of findings, the clinical symptoms and the pathological findings of this disease are given in detail. The following conclusions are arrived at concerning the path-

ology: "We can come to the conclusion, therefore, that pseudo-bulbar palsy in the adult is probably always caused by bilateral lesions, and that these lesions may be in the cortex, subcortex, internal capsule, central ganglia, as the caudate nucleus, optic thalamus, especially the lenticular nucleus, cerebral peduncles, pons or medulla oblongata. The lesions consist either of areas of softening or hemorrhages which can be seen macroscopically, or may not be found unless a careful microscopic examination is made. The central ganglia, especially the lenticular nuclei, are more often involved than the other parts of the brain. It is impossible to make a pathological distinction between a purely cerebral and a cerebro-pontile type unless a thorough microscopic examination has been made, and it so it will be found in most cases that there are diffuse lesions throughout the brain, and probably also in the medulla oblongata and pons. The cause of the whole symptom-complex is usually an arteriosclerosis of the bloodvessels of the brain.

It is probable that in the cases of pseudo-bbulbar palsy reported as caused by a unilateral lesion a more careful microscopic examination of the brain would have shown bilateral involvement.

"In infantile pseudo-bulbar palsy the cause is mostly congenital maldevelopment, although cerebral thrombosis and bilateral tumors in the basal ganglia may cause the symptom-complex of pseudo-bulbar palsy." (Author's abstract.)

4. *Muscular Atrophy, etc., in Tabes.*—In the first case the patient presented the symptoms of advanced tabes complicated by muscular atrophy in the lower extremities; an intense anemia, possibly due to a suppurative process, and trophic changes in the fifth nerve, as shown by painless falling out of the teeth. Pathologically the case presented the lesions of advanced tabes dorsalis in the posterior columns of the spinal cord and in the posterior roots; marked degenerative changes in the nerve cells of the anterior horns of the spinal cord, viz., chromatolysis, displacement of the nucleus and loss of dendritic processes; beginning changes in the cord produced by the anemia, shown by the swollen axis cylinders in the anterior columns and partial degeneration of the fifth nerve.

In the second case there was, in addition to typical lesions of tabes, a degeneration of irregular distribution in the lateral columns, probably due to interference with the blood supply. This case is interesting as affording an explanation for the return, or even exaggeration, of the knee-jerks in a case of tabes in which the posterior roots are only partially degenerated. Another important feature of the second case, especially in connection with the first case, was the correspondence of the healthy nerve cells with the unaltered musculature. From these cases and a study of the literature it would seem plain that the atrophy occurring in tabes is really due to degeneration of the anterior horn cells.

In most cases the spinal cord changes occur in pernicious anemia and the alteration is very intense, consisting of many foci of alteration, these causing secondary degeneration. From a study of this case it can be concluded that the earliest alteration of anemia, as shown by the spinal cord, consists of swelling of the axis cylinders. (Author's abstract.)

5. *Combined Pseudo-systemic Disease.*—After stating that the appearance of annular degeneration of the spinal cord can be caused by error in staining and preparing the specimen, this paper takes up the anatomy of the blood supply of the spinal cord. A case is then stated in detail of a girl afflicted with a paraplegia of spastic type and a discussion of the pathological findings is given. There was an unbroken ring of degeneration around the periphery of the spinal cord in the cervical and lumbar regions, and likewise a secondary degeneration of the columns of Goll in the cervical region. In addition was found a profuse small round cell infiltration of the pia, which in several instances could be traced entering the substance of the cord in company with the centripetal vessels.

The vascular origin of the lesions was upheld, and the monograph on the spinal cord by R. T. Williamson discussed. (Author's abstract.)

6. *Acute Myelitis.*—Dr. Rhein reports two cases of acute myelitis with post-mortem findings. Case I was a woman of 29, who developed in the fifth month of pregnancy motor and sensory paralysis of the legs, and incontinence of urine and feces. She complained of pains distributed generally over the body, but which were especially severe across the upper part of the chest. Examination of the specimens showed the presence of an acute inflammatory myelitis.

Case II was that of a woman of 39, who upon examination was found to be totally paraplegic. She was also anesthetic below the sixth rib in front and over a level four inches lower in the back. There was paralysis of the bladder and rectum. The knee-jerks were absent, but the Babinski sign was present. She died in thirty-two days after the onset of the symptoms, the paralysis having extended to the arms four days before death. There was no inflammatory change found in the spinal cord, but in the anterior horns of the thoracic and lumbar regions the nerve cells were altered.

The literature of the subject was examined and fifty-two cases of so-called acute myelitis with autopsy cited. Dr. Rhein concludes that (1) the most frequent pathological findings in acute myelitis consist of necrotic foci, thickened blood vessels, round-cell infiltration, small hemorrhages, destruction of the nerve fibers in the neighborhood of the diseased blood vessels, alteration of the nerve cells, and the presence of granular cells; (2) more rarely there may be degeneration of the nerve elements without evidences of inflammation; (3) there may be cases in which these two processes seem to be associated; (4) that infection plays an important rôle in the production of acute myelitis; (5) that the cause of acute myelitis may be either a micro-organism, the products of a micro-organism, or a toxin. (Author's abstract.)

7. *Bulbar Symptoms Occurring with Carcinoma.*—Bulbar symptoms have been reported previously only by Bruns and by Spiller and Weisenburg. In this present case a woman, aged 59 years, had had carcinoma of the breast for several years. Five months before her death she began to have bulbar symptoms, such as difficulty in talking and swallowing, and later talking and swallowing became almost impossible. The microscopical examination showed a disease of the nerve cells of the nuclei of the 6th, 7th, 9th and 10th cranial nerves. The symptoms were undoubtedly toxic in origin, and were due to the carcinoma poison. The views of Hudoverning that the alterations in certain nuclei in the bulb are the result of so-called "reactions at distance" is disputed. These changes are probably part of a general intoxication. (Author's abstract.)

8. *Fibrous Nodules in the Cerebral Pia Arachnoid.*—The patient was a male, 64 years of age, with a history of excessive alcoholism. At autopsy he was found to have a large retro-peritoneal sarcoma. There were no cerebral symptoms, but the cerebral pia was studded with numerous small white nodules, supposed to be sarcomatous on account of the coincident abdominal growth. The nodules were opaque, and resembled very closely both in appearance and distribution those occurring in tuberculous meningitis, so closely, indeed, that a differential diagnosis by the unaided eye would have been difficult. Microscopically, however, they were very different from tubercles, being composed of a fine, loosely-meshed connective tissue, poor in cells, and therefore resembling closely the Pacchionian bodies, except that they were situated within the pia and had no peduncle. (Author's abstract.)

9. *Primary Degeneration of the Pyramidal Tracts.*—The author has had the opportunity to study eight cases of primary degeneration of the central motor tracts, with necropsy. In six of these cases degeneration of the nerve cells of the anterior horns was present, so that these were

cases of amyotrophic lateral sclerosis. Two of the eight cases were ascending and at first unilateral in type, and later the paralysis became a triplegia. One began as a hemiplegia, and later the other side of the body became affected. Two may be regarded as uncomplicated cases of primary degeneration of the pyramidal tracts without implication of the nerve cells of the anterior horns of the spinal cord, and in neither of these cases was muscular atrophy present. In one case only could degeneration be traced as high as the motor cortex, but in two it could be traced into the internal capsule, and in two into the cerebral peduncle. In three of the cases the degeneration extended as high as the pons and not beyond. One of the cases showed that great spasticity of the limbs may be caused by a degeneration of the pyramidal tracts that is barely detectable, and that where a limb is spastic from such slight degeneration disease of the cells of the anterior horn on the same side as the degeneration may assist in the formation of contracture by increasing the paralysis. Some of the cases showed that disturbance of the bladder and rectum may be caused by degeneration of the central motor tracts, even where the posterior columns and the nerve cells of the anterior horns are not diseased; and that degeneration of the posterior columns is not to be diagnosed simply because this sign exists.

Dr. Spiller thinks it is questionable whether in amyotrophic lateral sclerosis the process is ascending. It is possible that there is a gradual death of the portions of the central motor neurones most remote from the cells of origin, and that the extent of the nerve fibers diseased varies in different cases, but that the whole portion of each fiber that is affected is diseased usually almost simultaneously, although the individual nerve fibers become affected at different periods.

One of the cases belonged to the type of primary uncomplicated unilateral degeneration of the pyramidal tract, although later the other pyramidal tract became affected; another belonged at first to the type of unilateral amyotrophic lateral sclerosis. (Author's abstract.)

Revue de Psychiatrie et de Psychologie Experimentale

(May, 1905.)

1. The Etiological Rôle of Syphilis in the Psychoses. Marchand.
2. The Curve of Intellectual Work After Kraepelin. Vaschide.
3. Attempted Homicide Committed by a General Paralytic with Melancholic Tendencies. Damaye.

1. *Syphilis in the Psychoses.*—The author concludes as follows: Syphilis by its toxin may determine the appearance of psychoses in predisposed subjects. This etiology of psychoses is rare. The mental malady appears almost always in the months following the infection. Specific cutaneous lesions coexist frequently with mental troubles. Syphilis, benign or virulent, may accompany mental diseases. The most frequent mental disorders are melancholia, mania, hallucinatory delirium and stupor. These psychoses terminate nearly always in recovery. Specific treatment, according to numerous clinicians, shortens the duration of the malady. Syphilis can determine mental disorders (melancholia, suicide) by hypochondrial ideas.

2. *Curve of Intellectual Work.*—The perpetual conflict between psychologists and philosophers is well known. The systematic researches of Kraepelin are of a nature to throw light on modern psychology. He has endeavored to find the laws governing the normal human mentality, and to this end has for some years, at Heidelberg, pursued investigations in the question of intellectual work.

I. *The curve of intellectual work.* Kraepelin attempts to show what